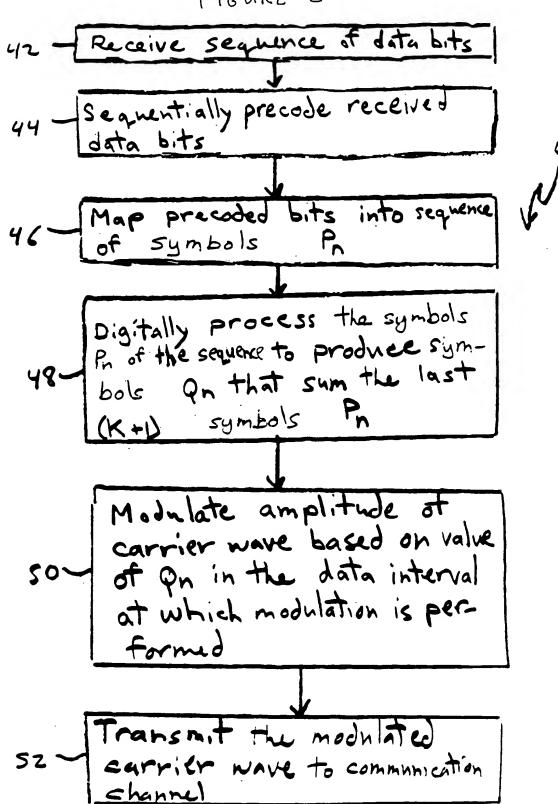
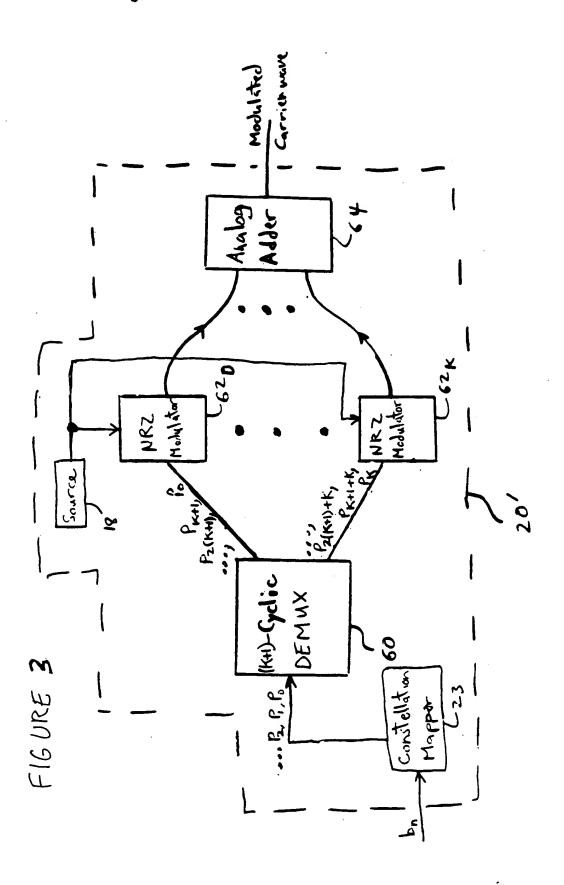
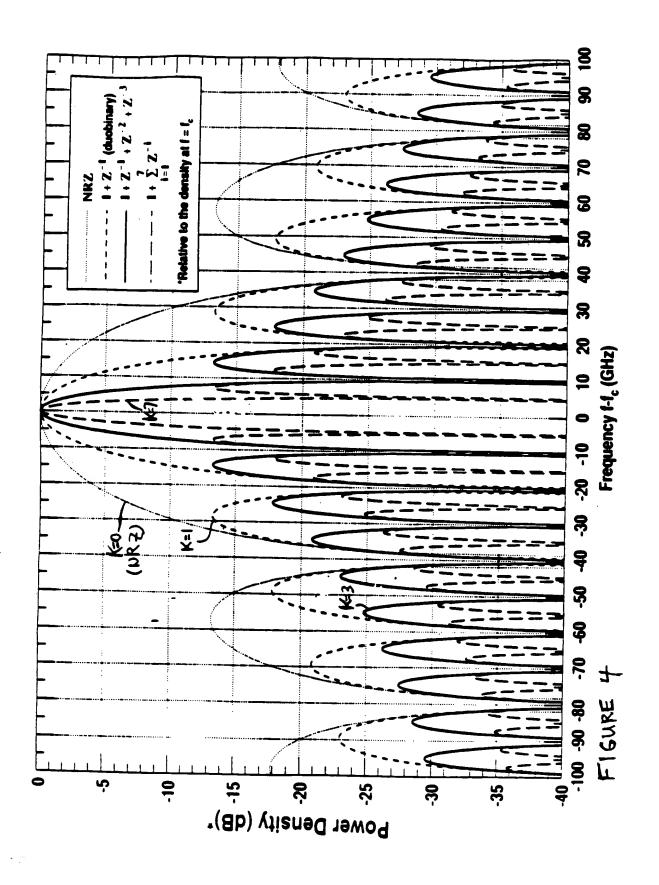


## FIGURE 2







Fifter received signal to select a carrier wave

Measure intensity of corrier wave

Estimate Value of transmitted intensity during a data period from the measured energy

Map estimated value of trans-

Map estimated value of transmitted intensity to an estimated value of the input
data bit based on a constellation in which multiple
intensity values correspond to one
value of a transmitted data bit

•

70

Figure 5

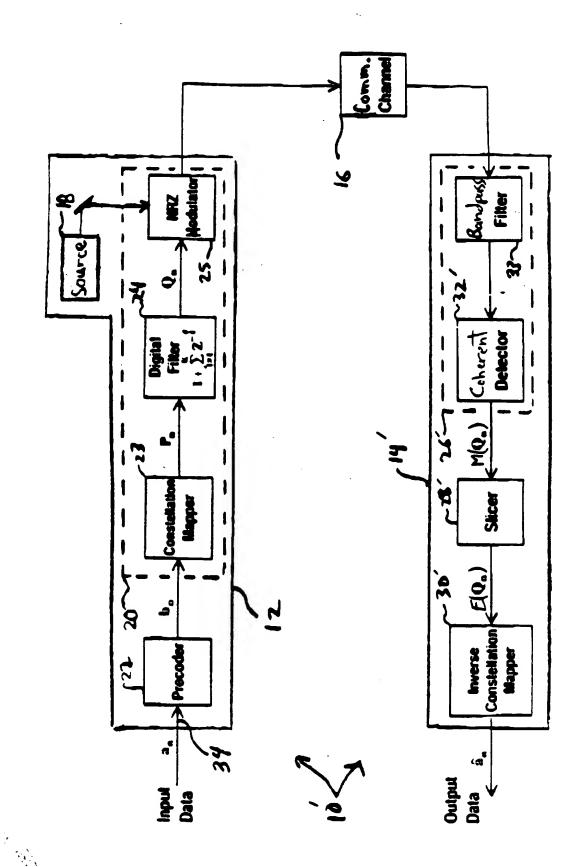


Figure (5

Filter received signal to select a carrier wave

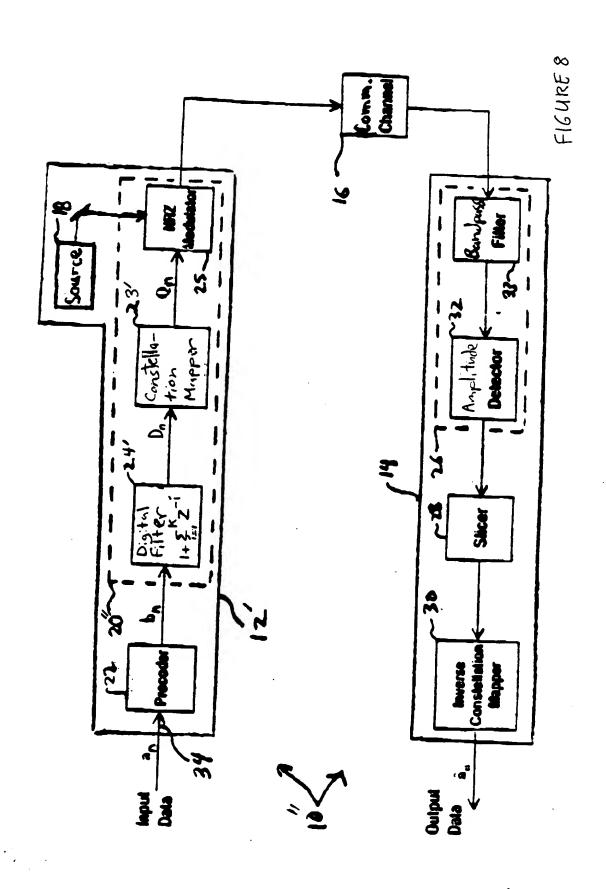
Measure amplitude and sign of carrier wave 74'

Estimate On for original carrier wave 76'
wave during signaling interval from the measured amplitude and sign

From the estimated value of the symbol On estimate a value of of associated input data bit on

70'

F16. 7



Number of Receiver Signal Amplitudes Q2	2	60	4	SO.	•••	<b>o</b>
Nun Receiv Ampli						
Number of Transmitter Signal Amplitudes On	က	vo		<b>5</b>	•••	17
Loss in Receiver Sensitivity (dB)*	0	E	4.8	9	•••	G.
Normalized Signal Bandwidth	1 2	1 4	1 6	<b></b>  &	•••	1/6
Digital Filter	$1 + Z^{-1}$ (duobinary)	$1 + Z^{-1} + Z^{-2} + Z^{-3}$	$1+\sum_{i=1}^{5}Z^{-i}$	$1 + \sum_{i=1}^{7} \mathbf{Z}^{-i}$	•••	$1 + \sum_{i=1}^{15} \mathbf{Z}^{-i}$

\*Relative to a baseline on/off NRZ modulation.